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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,207	11/19/2001	Katsuya Irie	1466.1048	8087

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EXAMINER

AWAD, AMR A

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 05/14/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,207

Applicant(s)

IRIE ET AL.

Examiner

Amr Awad

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 4-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 4-14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 09/778,919 (Pat-919). Although the conflicting claims are not identical, they are not patentably distinct from each other because by comparing the claims of the present application with the claims of Pat-919, we can see that the claims are fairly similar. For example claim 4 of the present application is similar to claim 1 of Pat-919. The apparatus of claim 9 of the present application is similar to method claim 1 of Pat-919. Similarly with respect to the rest of the claims in the present application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 4-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Okumura (US Patent NO. 5,107,353).

As to claim 4, Okumura (figure 9) teaches a method of displaying a color image using a three types of cells having different colors (R, G & B) that includes parallel cell columns having the same light color, and the light color of a cell column being different from that of the neighboring cell column, and wherein the column direction of a cell being shifted from that of the neighboring cell column among a set of the cell columns (figure 9). Okumura teaches switching a combination of cells having the same light color constituting a display of line perpendicular to the column direction (for that, Okumura shows in figure 9 that cells of the same color on the row (R for red color) is having the same polarity (i.e., switched on)) (col. 6, line 50 through col. 7, line 31). As can be seen above, and from figure 9, Okumura shows the claimed limitations.

As to claims 5-7, the claims are variations of the distribution of the cells, which are all taught by Okumura in figure 9.

As to claim 9, the claim is substantially similar to apparatus claim 4 and would be analyzed as previously discussed with respect to claim 4.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okumura in view of Shigeta (US patent NO. 5,659,226).

Okumura teaches all the limitations of claim 8 except the citation that the display device is a plasma display panel. Shigeta teaches having the display device as plasma display. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the device of Okumura as a plasma display because plasma is known for its reliability and superior images.

7. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okumura in view of Betsui et al. (US patent NO. 5,825,128; provided by the Applicant; hereinafter referred to as Betsui).

As can be seen above Okumura teaches all the limitations of claims 10-12 except the citation of having the luminance in each cell is determined by distributing value of pixel of the input image to two neighboring cells when lighting the two cells in the cell column, and that the two neighboring cells are lighted in all the plural cell columns having the same light color corresponding to the display line when the input image is non-interlace image.

However, Betsui (figure 4A) shows having a plasma display panel that includes a column wherein each two neighboring cells are lighted in all the plural cells columns having the same light color corresponding to the display line (col. 5, lines 38-41). Betsui does not show any interlacing mode, which means the input image is a non-interlace image.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Betsui to be incorporated to Okumura's device so as motivated by Betsui, to achieve a sharp color display of long life without ruining the easiness of its fabrication and the driving of the cells (col. 2, lines 33-35).

8. Claims 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Okumura in view Shigeta (US patent NO. 5,659,226).

As can be seen above with respect to claim 4, Okumura teaches all the limitations of claim 13 except the citation of performing an interlaced display or non-interlace images.

However, Shigeta teaches a plasma display device that includes interlacing (between the odd and the even lines) by changing the combination of cells of display that is perpendicular to the column direction in every field between the neighboring cell columns of the same light emission color (figures 5-6, 7, col. 5, lines 7-54 and col. 6, lines 23-38).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Shigeta interlacing by changing the combination of the cells of the display, to be incorporated to Okumura's device so as motivated by Shigeta, to increase in fineness of the display (abstract), and to make it easier to precisely manufacturing the row electrodes in excess of a patterning precision and width of the electrodes (col. 1, lines 42-45).

Allowable Subject Matter

9. Claim 14 is allowed.

Response to Arguments

10. Applicant's arguments filed February 17, 2004 have been fully considered but they are not persuasive.

Applicant (middle of page 6) argued that it is premature to compare the claims of the present invention with the claims of copending application 09/778,919 with respect to double patenting. Examiner respectfully submits that a provision double patent rejection is proper because the two co-pending applications as currently presented are subject to double patent rejection if the claims in the two applications are similar.

Applicant (page 7) argued that Okumura teaches a driving scheme in which an entire column of a same light color is lighted and in contrast, the present invention discloses a lighting pattern in which at least one neighboring cell in at least one neighboring cell in at least one cell column is lighted for compensation for each original

cell in a display line. It is respectfully submitted that such language is not found in claim

4. Applicant (top of page 7) argued that Okumura does not teach lighting two neighboring cells in at least one cell column when displaying one display line. Examiner respectfully disagrees. The claim calls for lighting two neighboring cells in at least one cell column out of a set cell columns each having the same light color when displaying a display line perpendicular to the column direction. This simply means that two neighboring cells for one column (in Okumura's device, this corresponds to the G or R or B columns in figure 9) having the same color (Red, Green or Blue). It is clear in Okumura's device that the adjacent cell in each single column is of the same light color. Therefore, using the broadest reasonable interpretation of the claim, Okumura fairly reads on the claimed limitation.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amr Awad whose telephone number is (703)308-8485. The examiner can normally be reached on Monday-Friday, between 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras can be reached on (703)305-9720. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4750.

A handwritten signature in black ink, appearing to read "Amr Awad", with a large, sweeping flourish extending from the end of the name.

A.A.
May 13, 2004